Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

1-39. (Cancelled)

40. (Currently Amended) A method of aligning left and right stereoscopic images, the method comprising:

capturing right stereoscopic image pixel information for a target object in a first array;

capturing left stereoscopic image pixel information for the target object in a second array;

calculating a first intersection position in the first array by:

for each of a plurality of rows in the first array, determining a first pixel column position that exceeds a row threshold value, a last pixel column position that exceeds the row threshold value, and a column position between the first pixel column position and the last pixel column position;

for each of a plurality of columns in the first array, determining a first pixel row position that exceeds a column threshold value, a last pixel row position that exceeds the column threshold value, and row position between the first pixel row position and the last pixel row position; and

determining a position at which a first line fitted to the column positions between the first pixel column positions and the last pixel column positions intersects a second line fitted to the row positions between the first pixel row positions and the last pixel row positions;

calculating a second intersection position in the second array;

selecting a portion of the first array and a portion of the second array such that the calculated intersection positions for each array substantially occupy the same position relative to the selected portions; and

outputting an aligned stereoscopic image to a viewer by displaying the selected portion of the first array and the selected portion of the second array.

41-42. (Cancelled)

43. (Currently Amended) The method of claim 40[[42]], wherein the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position.

44. (Currently Amended) The method of claim 40[[42]], wherein:

the plurality of rows comprises all rows in the array; or

the plurality of columns comprises all columns in the array; or

the plurality of rows comprises all rows in the array and the plurality of columns comprises all columns in the array.

45. (Currently Amended) The method of claim 40[[42]], wherein:

the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position; or

the row position between the first pixel row position and the last pixel row position is based on a mean value of pixel values between the first pixel row position and the last pixel row position; or

the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position, and the row position between the first pixel row position and the last pixel row position is based on a mean value of pixel values between the first pixel row position and the last pixel row position.

46-47. (Cancelled).

48. (Currently Amended) A method of aligning left and right stereoscopic images, the method comprising:

capturing right stereoscopic image pixel information for a target object at a surgical site in a first array;

capturing left stereoscopic image pixel information for the target object in a second array;

calculating a first line position in the first array;

calculating a second line position in the second array;

selecting a portion of the first array and a portion of the second array such that the calculated line positions for each array substantially occupy the same position relative to the selected portions;

outputting an aligned stereoscopic image to a viewer by displaying the selected portion of the first array and the selected portion of the second array; and

maintaining a selected working distance of an endoscope used to capture the right and left stereoscopic image pixel information by periodically ~~automatically~~ repeating the acts of capturing right stereoscopic image pixel information, capturing left stereoscopic image pixel information, calculating a first line position, calculating a second line position, selecting a portion of the first array and a portion of the second array, and outputting an aligned stereoscopic image.

49. (Cancelled)

50. (Previously Presented) The method of claim 48, wherein calculating the first line position comprises:

for each of a plurality of rows in the first array, determining a first pixel column position that exceeds a row threshold value, a last pixel column position that exceeds the row threshold value, and a column position between the first pixel column position and the last pixel column position; and

fitting the first line to the column positions between the first pixel column positions and the last pixel column positions.

51. (Previously Presented) The method of claim 50, wherein the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position.

52. (Previously Presented) The method of claim 50, wherein the plurality of rows comprises all rows in the array.

53. (Previously Presented) The method of claim 48, wherein calculating a first line position comprises using a pattern matching template for the first array, and wherein the first array pixel information corresponds to an image of a surgical site.

54. (Currently Amended) An endoscopic imaging system comprising:

an image capture stage that captures right stereoscopic image pixel information for a target object in a first array and left stereoscopic image pixel information for the target object in a second array;

a video processing stage that

calculates a first intersection position in the first array and a second intersection position in the second array, wherein calculating the first intersection position comprises:

for each of a plurality of rows in the first array, determining a first pixel column position that exceeds a row threshold value, a last pixel column position that exceeds the row threshold value, and a column position between the first pixel column position and the last pixel column position;

for each of a plurality of columns in the first array, determining a first pixel row position that exceeds a column threshold value, a last pixel row position that exceeds the column threshold value, and row position between the first pixel row position and the last pixel row position; and

determining a position at which a first line fitted to the column positions between the first pixel column positions and the last pixel column positions intersects a second line fitted to the row positions between the first pixel row positions and the last pixel row positions, and

selects a portion of the first array and a portion of the second array such that the calculated intersection positions for each array substantially occupy the same position relative to the selected portions; and

a monitor stage that outputs an aligned stereoscopic image to a viewer by displaying the selected portion of the first array and the selected portion of the second array.

55. (Previously Presented) The system of claim 54, wherein the target object comprises an object at a surgical site on which a surgical procedure is performed.

56. (Cancelled)

57. (Currently Amended) The system of claim 54[[56]], wherein the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position.

58. (Currently Amended) The system of claim 54[[56]], wherein:

the plurality of rows comprises all rows in the array; or

the plurality of columns comprises all columns in the array; or

the plurality of rows comprises all rows in the array and the plurality of columns comprises all columns in the array.

59. (Currently Amended) The system of claim 54[[56]], wherein:

the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position; or

the row position between the first pixel row position and the last pixel row position is based on a mean value of pixel values between the first pixel row position and the last pixel row position; or

the column position between the first pixel column position and the last pixel column position is based on a mean value of pixel values between the first pixel column position and the last pixel column position and the row position between the first pixel row position and the last pixel row position is based on a mean value of pixel values between the first pixel row position and the last pixel row position.

60. (Previously Presented) The system of claim 54, wherein calculating a first intersection position comprises using a pattern matching template for the first array, and wherein the first array pixel information corresponds to an image of a surgical site.

61. (Previously Presented) The system of claim 54, wherein the acts of capturing right stereoscopic image pixel information, capturing left stereoscopic image pixel information, calculating a first intersection position, calculating a second intersection position, selecting a portion of the first array and a portion of the second array, and outputting an aligned stereoscopic image are automatically repeated to compensate for stereoscopic image misalignment.

62. (Previously Presented) The system of claim 54 further comprising an endoscope through which the right stereoscopic image and the left stereoscopic image are transmitted to the image capture stage.

63. (New) A method for virtually varying a working distance of a stereoscopic imaging device for displaying portions of captured left and right images on a three-dimensional viewer, comprising:

receiving information of captured right and left images from the stereoscopic imaging device;

receiving a command to vary a working distance associated with the stereoscopic imaging device;

processing the information of the captured right and left images by cropping each of the left and right images so as to virtually vary the working distance according to the command; and

providing the cropped right and left images to the three-dimensional viewer for display on the three-dimensional viewer.

64. (New) The method of claim 63, wherein the processing of the information of the captured right and left images comprises:

determining whether the command to vary the working distance indicates that the working distance is to be increased or decreased;

if the working distance is to be increased, then cropping the left and right images so that left image reference points in the uncropped left image appear left of center in the cropped left image and right image reference points in the uncropped right image appear right of center in the cropped right image; and

if the working distance is to be decreased, then cropping the left and right images so that left image reference points in the uncropped left image appear right of center in the cropped

left image and right image reference points in the uncropped right image appear left of center in the cropped right image.

65. (New) The method of claim 63, wherein the command to vary the working distance is received from a user operable switch.

66. (New) The method of claim 63, wherein the command to vary the working distance is received from a user depressible foot pedal.

67. (New) The method of claim 63, wherein the command to vary the working distance indicates a stepwise adjustment of preset working distances.

68. (New) The method of claim 63, wherein the stereoscopic imaging device is a stereoscopic endoscope.

69. (New) A stereoscopic imaging system comprising:

a stereoscopic imaging device capturing left and right images of a scene;

a user operable input device;

a three-dimensional viewer; and

a processor configured to generate cropped left and right images by cropping the captured left and right images so as to virtually change a working distance associated with the stereoscopic imaging device according to a command received from the input device, and

provide the cropped left and right images to the three-dimensional viewer for displaying the scene relative to the virtually changed working distance.

70. (New) The stereoscopic imaging system of claim 69, wherein the user operable input device is a hand operable switch.

71. (New) The stereoscopic imaging system of claim 69, wherein the user operable input device is a depressible foot pedal.

72. (New) The stereoscopic imaging system of claim 69, wherein the user operable input device is configured to provide commands indicative of stepwise adjustment of preset working distances.

73. (New) The stereoscopic imaging system of claim 69, wherein the processor is configured to:

determine whether the command received from the input device indicates that the working distance is to be increased or decreased;

if the working distance is to be increased, then crop the left and right images so that left image reference points in the uncropped left image appear left of center in the cropped left image and right image reference points in the uncropped right image appear right of center in the cropped right image; and

if the working distance is to be decreased, then crop the left and right images so that left image reference points in the uncropped left image appear right of center in the cropped

left image and right image reference points in the uncropped right image appear left of center in the cropped right image.

74. (New) The stereoscopic imaging system of claim 69, wherein the stereoscopic imaging device is a stereoscopic endoscope.